DOCUMENT RESUME

ED 411 766 HE 030 541

TITLE	Insights on the Higher Education-Economy Relationship: Interviews with the Stakeholders. Higher Education and the Economy of the West. Working Paper #4.
INSTITUTION	Western Interstate Commission for Higher Education, Boulder, CO.
SPONS AGENCY	Ford Foundation, New York, NY.
REPORT NO	WICHE-2A224D
PUB DATE	1992-08-00
NOTE	26p.; For other working papers, see HE 030 538-542. For final report, see HE 030 537.
AVAILABLE FROM	Western Interstate Commission for Higher Education, P.O. Box 9752, Boulder, CO 80301-9752; phone: 303-541-0200 ($5).
PUB TYPE	Opinion Papers (120)
EDRS PRICE	EDRS Price MF01 Plus Postage. PC Not Available from EDRS.
DESCRIPTORS	Accountability; *Change Strategies; College School Cooperation; *Cooperation; Curriculum Development; Economic Impact; Education Work Relationship; *Educational Change; Educational Environment; Educational Planning; Elementary Secondary Education; Evaluation Criteria; Faculty Development; Futures (of Society); *Higher Education; Institutional Cooperation; *Integrated Services; *Partnerships in Education; Public Education; State Programs; Statewide Planning; Technology
IDENTIFIERS	Internationalism; United States (West)

ABSTRACT

This paper, one of a series from the Western Interstate Commission for Higher Education's (WICHE) project "Higher Education and the Economy of the West," presents a summary of interviews, conducted by the WICHE staff during the fall and winter of 1991-92 with 22 "Frontier Thinkers." Issues discussed included planning for the future, responding to the public, serving a new clientele, effective collaboration, and curriculum reform. In addressing higher education's future in the global marketplace, interviewees noted the importance of understanding the connection between a single system of education and the economy, the need to change the culture of higher education, suggested the use of planning as a catalyst, and discussed the role of the states. Accountability was seen as the best way for higher education to demonstrate responsiveness to its public, but a role was also seen for governing boards in this area. Almost all the respondents referred to the need for a commitment to collaboration; most frequently mentioned were partnerships that link higher education with elementary and secondary education. Other issues mentioned were more effective use of technology as the means to serve a new clientele, revision of undergraduate curricula, a focus on internationalism; and changing the faculty rewards structure to encourage behaviors to revise and modernize the curriculum. Appended is a roster of Frontier Thinkers. (CH)

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HIGHER EDUCATION
and the Economy of the West

Working Paper #4

Insights on the Higher Education-Economy Relationship:

Interviews with the Stakeholders

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Working Paper #4

Insights on the Higher Education-Economy Relationship: Interviews with the Stakeholders

Higher Education and the Economy of the West

Western Interstate Commission for Higher Education
P.O. Drawer P, Boulder, Colorado 80301-9752

Partial financial support was provided by The Ford Foundation

This is the fourth working paper for the WICHE project "Higher Education and the Economy of the West." It summarizes interviews with a small group of participants and observers of education, economic, and governmental systems.

The project focuses on an examination of the broad relationship between higher education and the economy and the ways in which higher education in the 16 WICHE states must change in order to be more responsive to the needs of the region in the 1990s and beyond.

The report was prepared by the Office of Research and Policy Analysis of the Western Interstate Commission for Higher Education (WICHE). Comments on the report should be addressed to Judith I. Gill, Director, Office of Research and Policy Analysis, WICHE, P.O. Drawer P, Boulder, CO 80301-9752, (303) 541-0224.

August 1992
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Boulder, Colorado 80301-9752
Telephone (303) 541-0200
An Affirmative Action/Equal Opportunity Employer
Publication Number 2A224D
Printed in the United States of America
27-70-00-400:5C:8/92:CM:2A224D

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FOREWORD

This working paper is part of the Western Interstate Commission for Higher Education's (WICHE) project "Higher Education and the Economy of the West," partially funded by The Ford Foundation. It is a report on the interviews of 22 "Frontier Thinkers" whose insights were sought on issues that must be addressed if higher education is to be responsive to the economic needs in the 1990s and the 21st century.

Paul Albright, director of communications, had primary responsibility for drafting this paper. Interviews with the Frontier Thinkers were conducted by Richard W. Jonsen, WICHE executive director; Harold Enarson, senior adviser; Judith I. Gill, director of research and policy analysis; Virginia L. Golder, research associate; Jere Mock, director of special projects; and Robin E. Zúñiga, research associate. Cherie Pedersen, senior secretary, prepared successive drafts.

WICHE gratefully acknowledges the commitment made by the Frontier Thinkers in preparing for and participating in the interview sessions. Their thoughtful comments provided direction for the development of the project's recommendations.

Richard W. Jonsen
Executive Director

Judith I. Gill
Director
Research and Policy Analysis

Western Interstate Commission for Higher Education
Boulder, Colorado
August 1992

This working paper is one of six publications resulting from the WICHE project, "Higher Education and the Economy of the West." For this project component we drew upon the thinking of a small group of "Frontier Thinkers"—22 knowledgeable and experienced participants and observers of education, economic, and governmental systems. Their insights were sought on issues that must be addressed if higher education is to be responsive to economic needs in the 1990s and the 21st century.

Telephone and personal interviews were conducted by WICHE staff with this group during the fall and winter of 1991-92. The format was one of a dialogue rather than a strict question and answer session. A roster of the Frontier Thinkers is included in the Appendix.

This paper summarizes those conversations around several themes threaded throughout the interviews:

- planning for the future;
- responding to the public and serving a new clientele;
- effective collaboration; and,
- the relationship of curriculum reform to faculty, productivity, and rewards.

Project Assumptions

Three primary assumptions have guided this project. The first is that the definition of higher education's contribution to the economy must be broadened. Often higher education's relationship with the economy is viewed within the narrow constraints of technology transfer and business-university alliances. In redefining the relationship, we return to the classic definition of the economy: the well-being of the majority of a society's citizens. When using this definition, the contributions that higher education makes to the economy include its connection with the public schools, the quality of undergraduate education, outreach programs for diverse racial and ethnic populations and rural areas, as well as research and development, technology transfer, centers of excellence, and specialized training.

The second assumption is that state policies can strengthen the relationship between higher education and the economy. Higher education must, therefore, work in coordination with state government to meet state economic needs.

The third assumption places the project in the context of fiscal constraints. Action taken by states and their colleges and universities is limited by the current austere financial

climate. And because of fiscal limitations, cooperation and differentiation among institutions are more important than ever before.

Change is perhaps the most pervasive and unifying theme of the project papers. As the economy rapidly becomes global and interactive, our nation's colleges and universities must be prepared to meet the challenges of a transformed economy. Higher education will be required to continue to advance technology through research, to make greater use of limited resources through increased collaboration with public and private sectors, to be responsive to workforce needs, and to maintain educational quality and access for as broad a population as possible. If higher education can be characterized as having responded to the economy by taking small steps in primarily one direction, WICHE is now advocating giant steps in some new directions. In the words of Clark Kerr, "The major test of a modern American university is how wisely and how quickly it adjusts to important new possibilities.[1]"

WICHE's Perspective

Given its history of fostering regional cooperation, WICHE's inclination on this project was to look for ways in which higher education could work in concert with the public schools, business and industry, local and state government, and the community to meet emerging economic needs.

The WICHE Commissioners, representing 16 western states, determined the project agenda, particularly its policy focus. While the Commissioners adopted a regional policy perspective for this project, they also understood that blanket recommendations are not possible or practical. Rather, general direction and insights on regional changes should play a role in determining a state's higher education agenda.

Project Components

In order to set boundaries on a project of this size and scope, we began with a list of 10 critical issues that have an impact on higher education's role in the economy:

1. Quality Undergraduate Education
2. Higher Education and Public School Connections
3. Educational Progression of Racial and Ethnic Minorities
4. State Higher Education Funding Priorities
5. Alternative Educational Delivery Systems
6. International Education
7. Differentiation of Institutional Roles and Missions
8. Identification and Development of Academic Programs to Meet Workforce Needs
9. Higher Education Research
10. Strengthening the Relationship Among Higher Education, Government, and the Private Sector

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[1]Clark Kerr, *The Uses of the University With a "Postscript—1972,"* (Cambridge, MA: Harvard University Press, 1977), p. 108.

The critical issues and the project activities—a collection of economic and educational data, survey of recent literature, sampling of exemplary programs, interviews with participants and observers of education, economic, and governmental systems, and a review of state economic development and higher education master plans—defined the project scope. As the various project activities were undertaken and after several conversations with higher education policymakers, the critical issues remained virtually the same but their focus changed to reflect what was learned. Individual project undertakings by themselves did not reveal fully the higher education-economy relationship; however, like pieces of a mosaic, when viewed as a whole, they became a powerful picture and allowed significant insight.

The following is a list of the working papers and the final report resulting from WICHE's "Higher Education and the Economy of the West" project. The working papers serve as a foundation for the final report—much of the policy analysis and observations in the final report are based on information from the five working papers.

- *A Region of Contrasts: An Educational and Economic Profile of the West (Working Paper #1)* is a presentation and analysis of demographic, workforce, and educational data for 16 western states. Data including employment by sector, educational attainment, foreign exports, and the location of higher education institutions in relation to population centers are examined at a regional level in Section One of the report. In Section Two, selected economic and educational characteristics are reported for each western state.

- *Exploring the Relationship: A Survey of the Literature on Higher Education and the Economy (Working Paper #2)* is a survey of recent literature on the relationship between higher education and the economy and a commentary on how this relationship can be enhanced. The paper addresses issues including the education challenges posed by a global economy, the essential education skills that workers will need, the role of technology in education and the economy, and infusing internationalism and multiculturalism into the educational experience. Publications by economists, education scholars, policy experts, government panels, and higher education and economic agencies are reviewed.

- *The Higher Education-Economy Tie: A Sampling of Exemplary Programs in the West (Working Paper #3)* is a review and analysis of more than 30 programs in the West that illustrate higher education's contribution to the economy. Programs fall into five categories: (1) school-university partnerships; (2) government-university initiatives; (3) small business outreach; (4) technology transfer and workforce training; and (5) rural or underserved population outreach.

- *Insights on the Higher Education-Economy Relationship: Interviews with the Stakeholders (Working Paper #4)* is a summary of interviews with a small group of knowledgeable and experienced participants and observers of education, economic, and governmental systems. The interviews sought their

insight on what issues must be addressed if higher education is to be responsive to economic needs in the 1990s and the 21st century. The paper summarizes interview conversations and is organized around four general themes: planning for the future; responding to the public and serving a new student clientele; effective collaboration; and the relationship of curriculum reform to faculty productivity and rewards.

- *Joined or Unconnected? A Look at State Economic Development and Higher Education Plans (Working Paper #5)* is a summary and analysis of the most recent state higher education master plans and economic development plans in the 16 WICHE states. The plans were reviewed with an eye toward noting how they relate to each other—that is, in what ways the statewide higher education plans articulate and address concerns with economic planning and development, and in what ways the economic plans articulate and address concerns with higher education planning and development.

- *Meeting Economic and Social Challenges: A Strategic Agenda for Higher Education (Policy Recommendations)* is the final report of the project. It presents project conclusions and a series of recommendations to state legislators and higher education policymakers. Included in the policy options discussion are implementation issues and examples of states and institutions currently making the recommended policy changes.

I. CHARTING HIGHER EDUCATION'S FUTURE IN THE GLOBAL MARKETPLACE

Frontier Thinkers clearly set forth the challenge to American higher education in a changed environment of global economic competition: reform and adapt or risk becoming irrelevant!

"Higher education has not, even marginally, addressed the issue of being responsive to the global economy," claimed one nationally prominent commentator on higher education. "There is a growing mismatch between the way we operate and what the economy needs...We are becoming irrelevant..."

"The university must open its doors to a discussion of its role in the new economy," added a western state legislator. "The current perception is that higher education is not a playing member of the team; higher education is not relevant," she added.

Judgments of others, while not as pessimistic, nevertheless acknowledged an imperative for higher education to change, reform, restructure, or otherwise adapt to the new economy. Several advocated a thoughtful and collaborative process of long-range planning to effect the needed changes.

Demographic shifts and financial constraints are forcing attitude changes, claimed a federal administrator and former legislator.

One nationally recognized leader, however, demurred on faulting higher education. Too much blame has been placed at education's doorstep for the ills of society, he claimed. In his view the U.S. has fallen behind at the elementary and secondary levels but remains competitive at the postsecondary level.

"When we are examining our economic problems, we must look to the family and to the community," he added. "We must further recognize that one-half of the skills needed on the job must be learned on the job. Education provides only one-half of the training needed for satisfactory job performance. Illiteracy has had a significant impact on job training."

The Connection to the Economy

The connection between a single system of education and the economy must be understood so that reasoned responses are developed to deal with changed circumstances, said several of those interviewed.

Education must be seen as one system that links competencies of the high school graduate, the preparation of college freshmen, life-long learning, adult literacy, and workforce quality. "Graduation from college is not an end in itself," noted one observer.

Added another: "We need a 'connection design' linking problems and wisdom," with the discussion stressing the role of people in the economy. "Brainwork is what improves the economy, and brainwork is the business of higher education."

Indeed, "brainwork development" is precisely what is needed for the new economy, agreed state higher education agency officials in two states. They see a need to better assess workforce skills and improve higher education for lifelong learning and state-of-the-art training aimed particularly at those on the bottom half of the economic ladder.

It is imperative that higher education pin down and then effectively articulate this connection to its own state economy, says a state legislator. If it succeeds, higher education's "implementation of this new vision will provide the accountability that proves to all that there is a new direction and vision for higher education."

Changing the Culture of Higher Education

Success in defining the economy-education link and then implementing it will require change, whether the term for that is "reform," "accountability," "restructuring," "redefinition," or "a new culture."

Threaded throughout the interviews were comments such as: "Only with structural change will we have significant change that is responsive to the needs of the new economy."

"Universities need to understand that they alone cannot define role and mission. The higher education constituency (including the community) should be involved in the redefinition of a role and mission which emphasizes outcomes."

"We must also begin to force institutions to focus on what they do best by mandating that institutions have differentiated roles and missions. We can no longer afford to support a broad mix of comprehensive institutions. We need a range of institutions that can more effectively serve the economic needs of our states and regions."

"Our flagship and land grant institutions are in a crisis period. Their survival will require basic reforms: they must begin to work in groups, share assets, become more closely involved with the people they serve, and create greater distinctions in their roles and areas of expertise."

Planning as a Catalyst

Strategic planning was cited as the process by which the roadmap to change can be laid out, articulated, and better understood.

"We must first engage in strategic planning," said the president of a urban university. "This requires examining our student demographics and our current mix of programs to

better understand who we are educating and how our institutions relate to the needs of the economy."

Strategic plans at the state and campus levels are the best vehicles for communicating the contributions that higher education can and does make to the economy, added this president.

Proper planning will lead higher education in a new direction which could be justified and expressed as a "state vision," according to a legislator.

Higher education needs to make the case for this "vision," including greater visibility of important issues. Some education executives referred to more frequent and effective use of the 'bully pulpit' by higher education leaders. "The university president can use the bully pulpit to set a new tone," said the president of a land grant university.

Added another president: "It also requires that institutional leaders educate faculty and staff about the contribution their institutions make to the economy."

A Role for the States

As major funders of public education, the states are important participants as higher education strives to mold itself for the 21st century. A community college official declared that a lack of state government understanding and support can stifle innovation, flexibility, and adaptability of institutions.

"Both the institutions and the states need to play a role in determining the best mix of differentiated roles," added a university president. "Institutions should do this by defining their academic strengths. State funding should follow the conversation about role and mission. This process will require that state policymakers have a comprehensive understanding and view of state and regional educational and economic needs."

Some Frontier Thinkers cited state incentive programs as important to "encouraging new behavior," while one pointed out a more directive approach used by the states, namely incremental, targeted funding that forces reallocation of funds within an institution.

II. RESPONDING TO ITS PUBLIC

Most Frontier Thinkers believe much of higher education has lost its way in the forests of academe, responding poorly or not at all to the public it is asked to serve. Several of those interviewed, however, also identified existing trail markers that may help guide higher education toward a more productive and accountable system within the new economy.

Some despaired that higher education no longer serves the "common good" but favors the private interests of faculty and students. One leader provided the strongest indictment: "The motto now is, 'If you pay for it, it's yours. No need to help anyone else; they didn't pay for it.'"

The harshest judgments were leveled against four-year colleges and universities, some for over-emphasizing research at the expense of teaching and public service. Other "comprehensive" schools were criticized for seeking to emulate the top echelon of major research institutions when teaching undergraduates should be their primary goal. There is concern about what one respondent termed "a curriculum that reflects what the faculty wants to do, rather than what needs to be taught."

Some Frontier Thinkers cited "comprehensive" four-year colleges as ideally suited to improve the quality of the teaching workforce and to assist in other workforce needs of industry if they "give up their aspirations to become research universities."

On the other hand, community colleges were cited as the most responsive to the public and characterized by several as the "inheritors of the land-grant mission."

"Today, the community college is the most accountable segment in higher education," said one national higher education spokesperson. "It is the segment that is most responsive to the needs of the new economy...The 'spirit' is right at the community college. Four-year colleges and universities can learn a great deal from community colleges."

Learning should center on identifying and responding to workforce needs of the future. "International competition is creating shortages of trained manpower and maybe an overabundance of untrained manpower. One of the most crucial roles of education is workforce quality."

Teacher training, technology transfer, adult basic skills and literacy, continuing education, state-of-the-art training, and life-long learning are all aspects that need greater attention at the four-year level, in the view of several Frontier Thinkers. If higher education's two-year and four-year sectors fail to cooperate in this regard then industry will provide its own workforce education and push higher education further to the sidelines.

While some Frontier Thinkers see the quality of workforce training as a critical issue in relationship to the economy, a note of caution and a reminder of higher education's historic role was sounded in at least one interview. "Our higher education system was not set

up as a creature of the workforce," said one official. Nevertheless, he said the higher education community should look upon research, training, and knowledge as adding "to the life of the working person."

Accountability as a Response

Higher education can demonstrate its responsiveness to its public best through accountability measures, including assessment, in order "to give meaning to what we are trying to accomplish."

"Are we retraining students?" queried one Frontier Thinker. "Are we graduating students? Are students finding jobs? Are they qualified for the jobs? If we are unable to answer these questions, we will have an increasingly difficult time persuading legislators and business leaders of our need for more financial support. We need to more effectively communicate and demonstrate what skills are imparted by virtue of a higher education."

Indeed, higher education was seen by one legislator as "profoundly unaware" of state politics. Higher education may have solutions to many of the problems plaguing the states (if those answers exist at all) but this legislator sees no commitment by higher education to work at addressing state problems.

Some suggested that faculty should help legislators develop "real policy analysis" of issues and that higher education administrators "take on this new and more responsive role."

A western state university president forecast that state legislators will support higher education "if they perceive the university has done everything to use funds effectively. Universities need to make reallocation decisions very visible... Open disclosure of local and state funds is important to trust issues and relationships...Management audits, conducted by outside consultants, can make important contributions to demonstrations of accountability."

Two Frontier Thinkers with strong rural expertise couched accountability in broader terms. They saw a "shared agenda for improvement" involving higher education, the community, the public schools, and other "stakeholders." In such partnerships, there is a danger that higher education will be perceived as the "900-pound gorilla," they said. "That has to be addressed. We need to be accountable for being partners and cooperators, not experts."

A Role for Governing Boards

Stronger, involved, informed, and more proactive higher education governing boards were mentioned as another vehicle by which accountability to the public is measured and enhanced. According to one interviewee, "If the governing boards do more, then the legislature is not as likely to become involved in an intrusive way."

Since there may be long-standing suspicion among institutions, states, and other participants it might be advisable to have "third parties," i.e., critics of the educational system, represented on controlling boards, suggested one former school superintendent.

III. COMMITMENT TO EFFECTIVE COLLABORATION

Almost all of those interviewed referred to the necessity of a commitment to collaboration as higher education reconfigures to serve the needs of the new economy. That collaboration should involve partnerships with various stakeholders—elementary and secondary education, state governments, business and industry, and two-year and four-year colleges and universities.

"The best we can do is to create collaborative relationships and consortia to make boundaries as invisible as possible to students," stated one community college leader. The ideal, in his view, is that various institutions would work together to overcome educational barriers with an objective of ensuring the success of students.

As another community college official put it: "Partnerships are vital to economic development—partnerships with K-12, the private sector, the public sector, and the four-year institutions."

Partnerships with K-12

Most frequently mentioned were partnerships that link higher education with elementary and secondary education.

In past decades higher education paid little attention to K-12 and when it did it was intent on reforming the lower grades rather than acknowledging that segment as an equal partner with its own views, some of them involving reform of higher education. "Tension" is too mild a term for such a relationship, said one leading participant in education reform.

"Universities are going to be driven to form closer relationships with K-12 in order to deal with policymakers who want to know what higher education is doing for the state and community," said a campus leader.

Nothing significant will occur, however, until a new level of trust and cooperation is established between higher education and K-12, and with the states that support both systems.

"Make it a continuum rather than separate institutions," advocated one researcher. "If we change the way we teach in K-12, how will that impact their admission into college? We need to re-examine what constitutes a good high school education. On the other hand, we need a re-examination of entrance requirements to higher education so that transition becomes seamless."

This theme of creating a "seamless continuum" from K-12 through higher education was echoed by others.

"You can't really separate the system," said one. "When there is an indictment of K-12, the business person wonders why higher education isn't responding. Are we separating the two for self-preservation at a time when they should hang together?"

"Within the next 9 or 10 years we should be aiming for tomorrow's high school education to be equivalent to today's baccalaureate level," said the head of one state higher education system. "We should scale up expectations and opportunities. People certainly have the intellectual capacity to do more than they are doing in our schools all the way across the spectrum."

There was acknowledgement that productive, long-term partnerships will not be easy to construct or sustain. One federal official noted:

"Other countries have national ministries of education, and everything is coordinated. There are national tests at every level, and education is tied directly into the nation's manpower planning. In the U.S., the federal government has little programmatic involvement in education. We have thousands of systems of education. Local schools are controlled by local districts, higher education is governed by multiple boards...Because of our disaggregated system of education, collaboration will have to be developed institution by institution, state by state."

Some recommended formal arrangements so that collaboration is not viewed as a "project" but as the creation of a new linkage appropriate and integral to the missions of both K-12 and higher education.

Other Collaborations

Stronger collaborations also were recommended for higher education with business and industry, state government, and between two-year and four-year colleges.

"Collaborations with legislators will help build confidence in higher education, but we need to define the territory of collaboration between legislatures and higher education institutions," said one leader.

Some advocated state incentive funding to stimulate and then support collaborative efforts between educational segments and with business and industry.

Colleges that are successful in collaborating with business and industry will be those who make it a priority "from the president of the institution down."

Specific recommendations were voiced on ways higher education might better collaborate with the private sector: faculty working with industry to solve problems, loaned executive programs, faculty-business brainstorming sessions, "revolving door exchanges" of faculty and business executives, and higher education training in the corporate world.

There were cautionary words as well. A federal official put it this way: "Colleges should not be the servants of industry. They have a much broader function. Industry, itself, has the duty to train its workers. Business complains when education doesn't meet its standards, but you don't see businesses providing the money needed to make this happen. If they want a better educated workforce they should provide funding and become more involved in colleges and universities."

Two veteran university presidents favored higher education forming closer ties with the corporate world but cautioned against faculty being "bought" with equipment, profits on patents, or allowing business and industry to drive research agendas.

IV. SERVING A NEW CLIENTELE

Most of higher education knows its clientele has acquired a "new face" during the past decade. Yet that has failed to spur much change in large segments of the enterprise. Slowly, awkwardly, and often reluctantly institutions are adjusting educational offerings to accommodate the altered world it confronts.

Higher education must be more "accommodating to student needs," in the words of a community college executive. "We need to understand student demographics and changing student clientele."

More and more, that clientele includes students from ethnically diverse backgrounds, many of them economically, linguistically, educationally, socially, or otherwise disadvantaged; older students with more "real life" experiences; part-time students juggling jobs and education; and single parents and displaced homemakers who lack traditional family support systems.

"Institutions still do not structure the academic schedule or services to meet the needs of the new majority students," observed a federal official. "Why can't more colleges offer classes on weekends and at night? Why can't they provide day care? Some community colleges are doing this. Some other countries are doing this through distance learning. But not much is happening at four-year colleges."

The problem may be more one of attitudes than of fiscal or policy issues. The need, said one regional observer, is to shift the academic culture away from a campus-based view of education.

"We should think of the whole state as our classroom," echoed a state chancellor of higher education. "If we proceed along these lines we will act differently and think differently about funding."

Acting and thinking differently are exactly what another leading educator had in mind. "Higher education must understand that the university is dominated by disciplines and that states are dominated by problems. What we need are people who have grown beyond their disciplines. We need to extend the university beyond its campus building structures."

Institutions that are successful in breaking their campus bonds should be rewarded by states, especially if their activities are responsive to the new economy, a retired university system president said. "The legislature needs to be responsive to institutions and institutional leaders who are trying to change."

A starting point, suggested two state higher education agency executives, would be a redefinition of "access" to higher education. Access should not be simply admission into

an institution, can no longer mean an open door at every institution, and should not be limited to 9 a.m.-5 p.m. Monday through Friday of each school week.

Their redefinition of access includes a recognition that not everyone learns in the same way or at the same pace. And they recommended development of improved teaching methods, including using technology, to serve the "bottom half" of the socio-economic scale.

More Effective Use of Technology

Technology is to enhance, not replace. That was the position taken by half a dozen Frontier Thinkers who are convinced that the only way higher education can meet the nation's student access and learning needs is through technology.

"In order to have the educational reform that is needed, you need to make maximum use of available telecommunication," said one.

Indeed, educational technology is a natural and comfortable application in an emerging global economy. "Technology provides the opportunity for the scholarship community to have an international community of scholars. Technology provides the potential for higher education to think and work globally," commented one interviewee.

Frontier Thinkers were quick to point out a number of warning signs along the road of expanded technological use. For example:

"Telecommunications, to be effective, must be interactive. It can't be one-way." "A good educational delivery system is not all telecommunications or all traditional delivery; it is a combination." "The way to deal with cultural obstacles to the use of telecommunications is to have strong interactions among people." "Effectiveness in the use of technology will improve efficiency...if combined with human resources."

V. CURRICULUM REVISION AND FACULTY INCENTIVES

The revision of undergraduate education is seen as critically important to bolstering higher education's contributions to the economic revival of the states, the region, and the nation. In addition, there is growing consensus that structures that motivate and reward the faculty to revise curricula are crucial elements in bringing about the necessary changes.

According to one Frontier Thinker, really significant changes in learning occur in the classroom and the laboratory through the interaction between teacher and student. Therefore, curriculum reform is dependent on changed faculty attitudes and approaches which, in turn, can be influenced and encouraged by leadership, incentives, and rewards.

Rethinking the Curriculum

The United States may have the best higher education system in the world, but there are signs that competitors are catching up, one interviewee contended. A forceful response is indicated.

One individual advocated beginning a reappraisal of undergraduate and graduate education with a basic question: "For all academic programs we must have the answer to the following question, "What does the degree mean?" In partial response, he and others advocated examining higher education as an investment in people and not as an economic tool.

The system must improve on helping students with critical thinking and problem solving skills. "Higher education is doing a lousy job of teaching people to think, which means we are doing a lousy job of teaching," said one.

Added another: "Higher education helps people think and understand themselves, and make intelligent decisions. This kind of person is what industry needs. We need a system of education that promotes a student as active learner. We need to create an environment that opens up opportunities for students to learn actively."

Since higher education is slow to respond to external forces, major curriculum change will take time and should be sought over the long term.

"The 'fix' will take 30 years," predicted one Frontier Thinker. "It involves a new generation of scholars, a redefinition of rewards for faculty, and a profound rethinking, at the highest levels, of the interrelationships among disciplines."

A Focus on Internationalism

A particular concern cited by some Frontier Thinkers was revising the curriculum to reflect the global economy. "There is a growing mismatch between the way we operate and what the economy needs," was how one put it.

In this view, students lack important knowledge and understanding of the world, faculty talent is inadequately applied to world problems, and resources applied to research and public service are "off the mark."

Added a state legislator: "Given the rapid changes in the global economy, higher education needs to move quickly...(It) needs to operate as a 'think tank' for the major issues confronting the states. Higher education needs to become 'solution-oriented.'"

Encouraging the Faculty

Frontier Thinkers see institutional leadership as instrumental in bringing about changes in faculty behavior that will effectively revise and modernize the curriculum. Changes in the faculty rewards structure and the addition of incentives are complementary to such leadership.

Some see "a lot more willingness and interest to behave differently on the part of faculty than they are normally given credit for." It is the role of campus and system leaders to channel these changes so that higher education is more effective and efficient during a period of constrained resources and increased competition.

"If the assumption is made that dollars for public higher education will not be increased, then access and quality issues require greater efficiency in the use of faculty resources," said a higher education scholar.

"There is a sufficient critical mass among the rank-and-file faculty that is amenable to service," contended two other leaders. "We need to open up rewards and incentives to enable people to behave more creatively...It is important to realize that this kind of thinking is out there to be cultivated."

Specific suggestions included: more interdisciplinary involvement in teaching and in faculty tenure decisions as well; "organization" of faculty entrepreneurs to bring in additional funding to the universities; support for longer term, team research efforts; elevating the importance of community service as part of the reward structure; and relating tenure and promotion policies more closely to institutional mission and community service.

In general, concluded the president of a western university, policies dealing with faculty rewards and tenure "can be used to encourage greater involvement of faculty in activities that will strengthen the relationship between higher education and the economy."

CONCLUSION

The interviews conducted by WICHE staff were not designed to seek unanimity or even general consensus among the 22 participants. Nevertheless, some general conclusions can be drawn from the thrust of their comments.

For one, it is clear that higher education is being challenged to be more responsive to its many publics, most especially to a student clientele that is decidedly different in its educational requirements and desires. Change is viewed as critical if the higher education enterprise is to relate significantly to the demographic and economic shifts underway in the nation and the world.

Many aspects of this overall change revolve around the revision and strengthening of undergraduate education, including the more effective use of technologically based learning tools and broadening the curriculum to encompass global understanding.

The need for solid and meaningful collaboration was cited in numerous interviews. Although collaboration was advocated across a broad segment of economic and educational stakeholders, the greatest emphasis was placed on collaboration between colleges, universities, and the elementary-secondary schools to fashion a seamless educational system that meets the needs of today and tomorrow.

In the view of almost two dozen leading individuals, higher education can remain a key component of the nation's economic engine if it understands the requirements of a new and competitive global economy, and responds with foresight and thoughtfulness.

APPENDIX

Roster of "Frontier Thinkers"

Interviewed by WICHE staff were (in alphabetical order):

Ernest L. Boyer
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The Carnegie Foundation for the
Advancement of Teaching
Princeton, NJ

Harlan Cleveland
Hubert Humphrey Institute
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Vice Chancellor for
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Maricopa County Community
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Paul Elsner
Chancellor
Maricopa County Community
College District Office
Phoenix, AZ

Harold Enarson
President Emeritus
The Ohio State University
Boulder, CO

Jeffrey Gilmore
Research Associate
Department of Education
Washington, DC

John Goodlad
Professor and Director of Center
for Educational Renewal
University of Washington
Seattle, WA

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University of California
Berkeley, CA

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University of Denver
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Maricopa County Community
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Colorado Commission on
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Mara Mayor
Director
The Annenberg/CPB Project
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Paul Nachitgal
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Rural Education Project
Mid-Continent Regional
Education Laboratory
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Minnesota Higher Education
Coordinating Board
St. Paul, MN

Judith Ramaley
President
Portland State University
Portland, OR

Terry Roark
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University of Wyoming
Laramie, WY

Patricia Saiki
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Arliss Sturgulewski
State Senator
Anchorage, AK

Douglas Treadway
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North Dakota University System
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